



Joint Service Collective Protection

Commodity Area Overview

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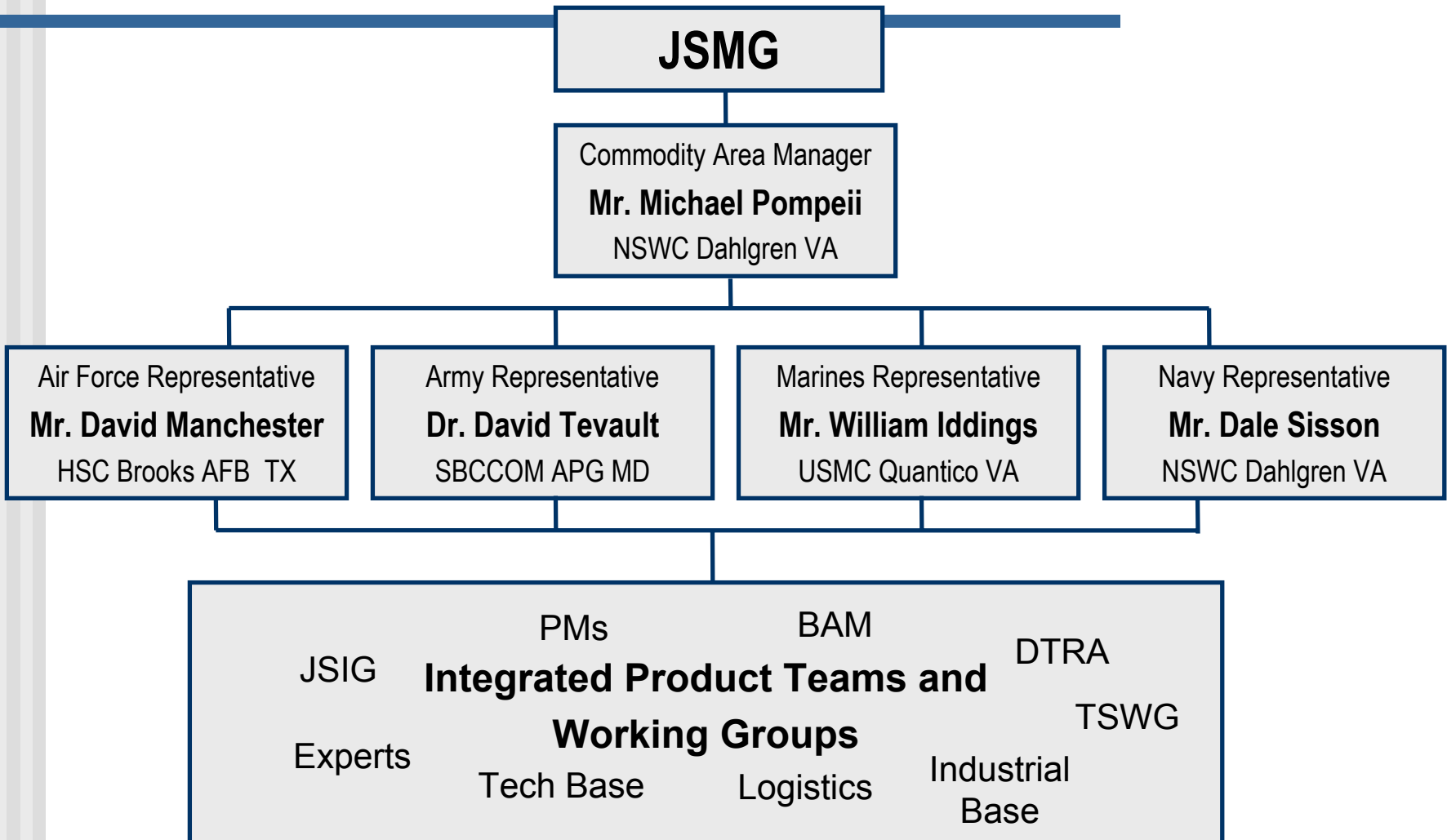
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Agenda

- Organization
- NBC Collective Protection (Colpro) Basics
- Colpro Mid- and Far-term Objectives
- Equipment and Program Info
- Industry Opportunities
- Summary

Collective Protection Commodity Area Management



ColPro Basics

- Provide filtered air at slight overpressure.
- No need to wear cumbersome protective clothing and masks.
- Use airlock vestibules to enter/exit during routine operations.
- Use a Contamination Control Area (CCA) to enter during chem-bio-radiological (CBR) conditions.

Colpro Basics

- Where is colpro typically required?
 - Command/control areas
 - Medical areas
 - Rest/relief areas
- Colpro applications:
 - Mobile
 - Vehicles, ships, aircraft
 - Transportable
 - Portable shelters, tents, vans
 - Fixed Site
 - Buildings, permanent shelters
- Colpro applications can be permanent or temporary.

Mid-term Collective Protection Objectives (2003-2007)

- ❑ Increased number of shelters for command & control, medical, and rest/relief areas.
- ❑ Improved shipboard systems.
- ❑ Rapid insertion of technology improvements to existing equipment.
- ❑ Begin fielding new technology shelter system.

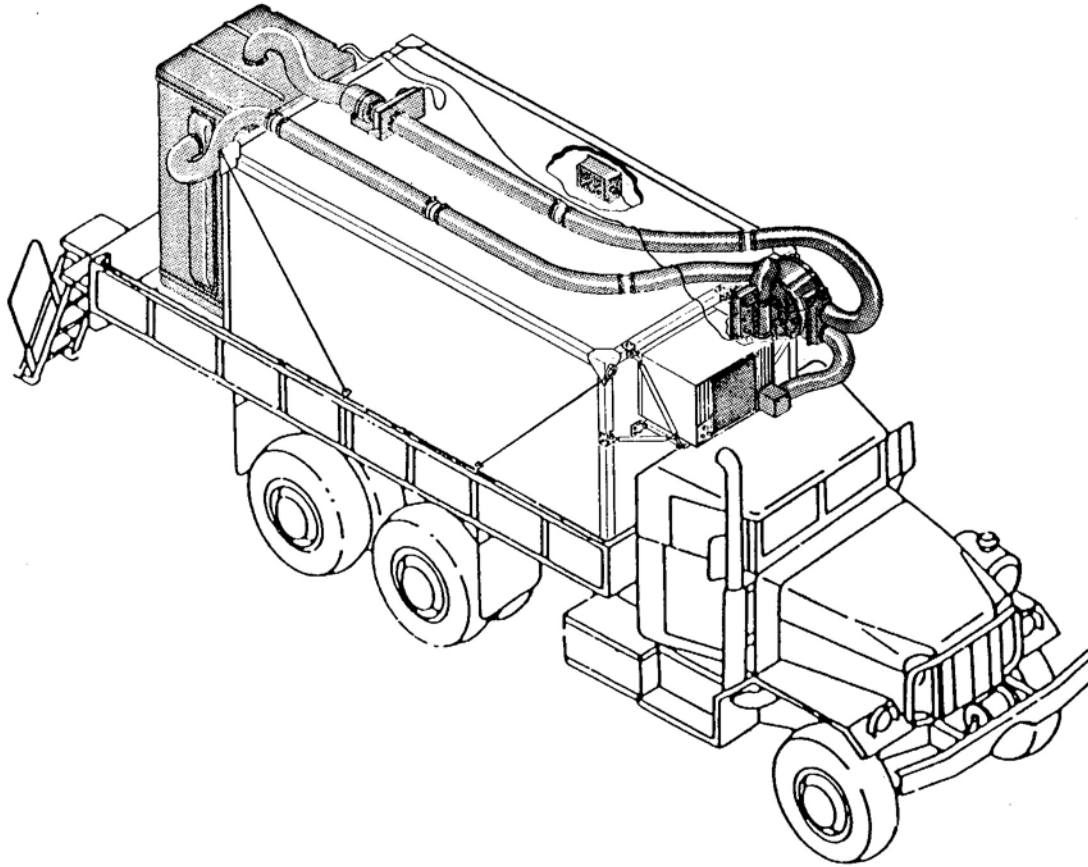
Far-term Collective Protection Objectives (2008-2017)

- ❑ Standardization of equipment.
- ❑ Fielding of technology improvements.
- ❑ Full integration of colpro into standard shelter systems.
- ❑ Fielding of novel filtration technologies.

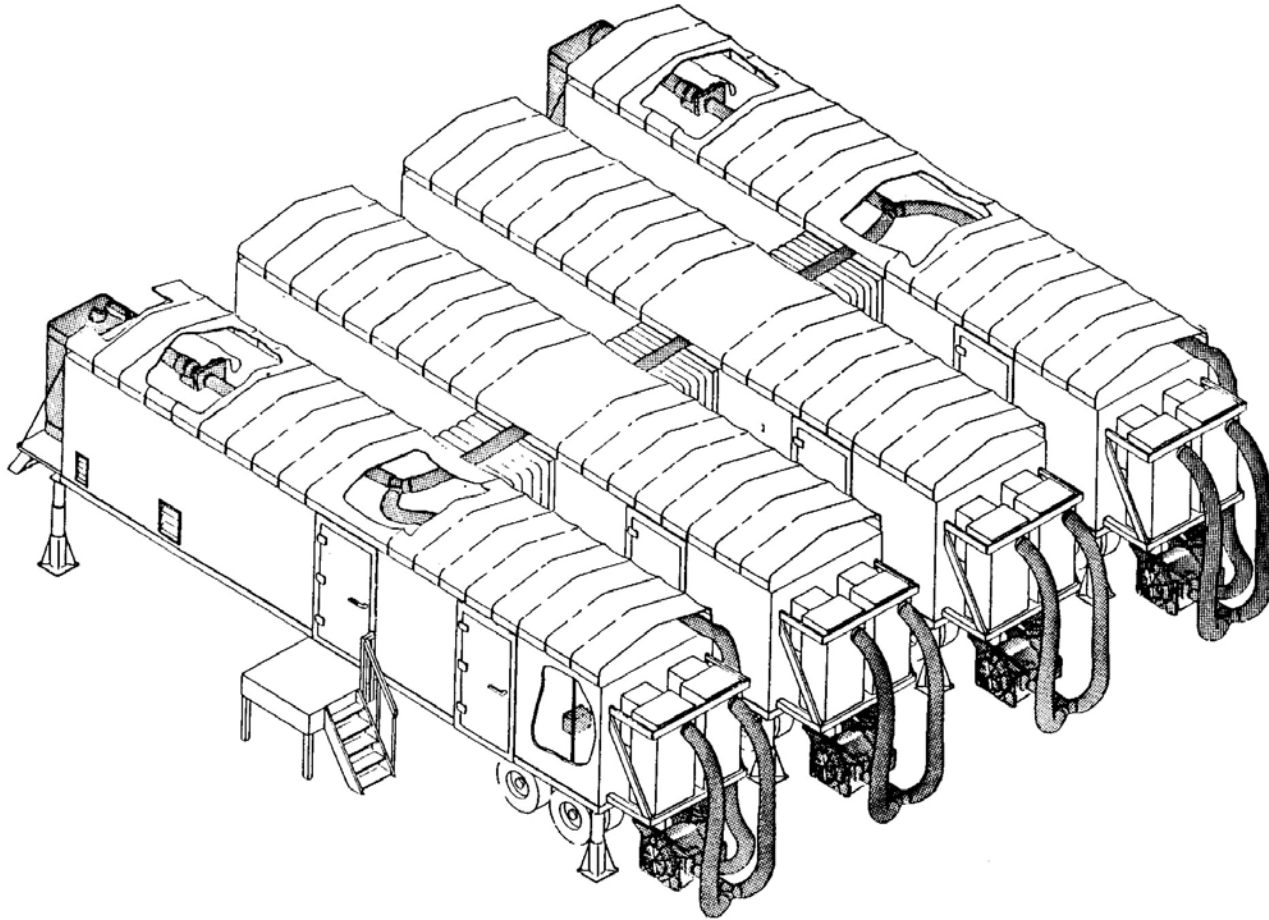
Colpro Equipment and Program Info

- Modular Collective Protection Equipment (MCPE)
- M28 series tent equipment
- M20A1 room liners
- CPS Ship Backfit
- Chem-Bio Protective Shelter (CBPS)
- CP for Deployable Medical System (CP DEPMEDS)
- Joint Collective Protection Equipment (JCPE) Program
- Joint Transportable Collective Protection System (JTCOPS) Program
- Building Collective Protection
- Technology Base Program

Example 1 of an MCPE application.



Example 2 of an MCPE application.



M28 series Tent Liner & Equipment



M20A1 Room Liner & Equipment



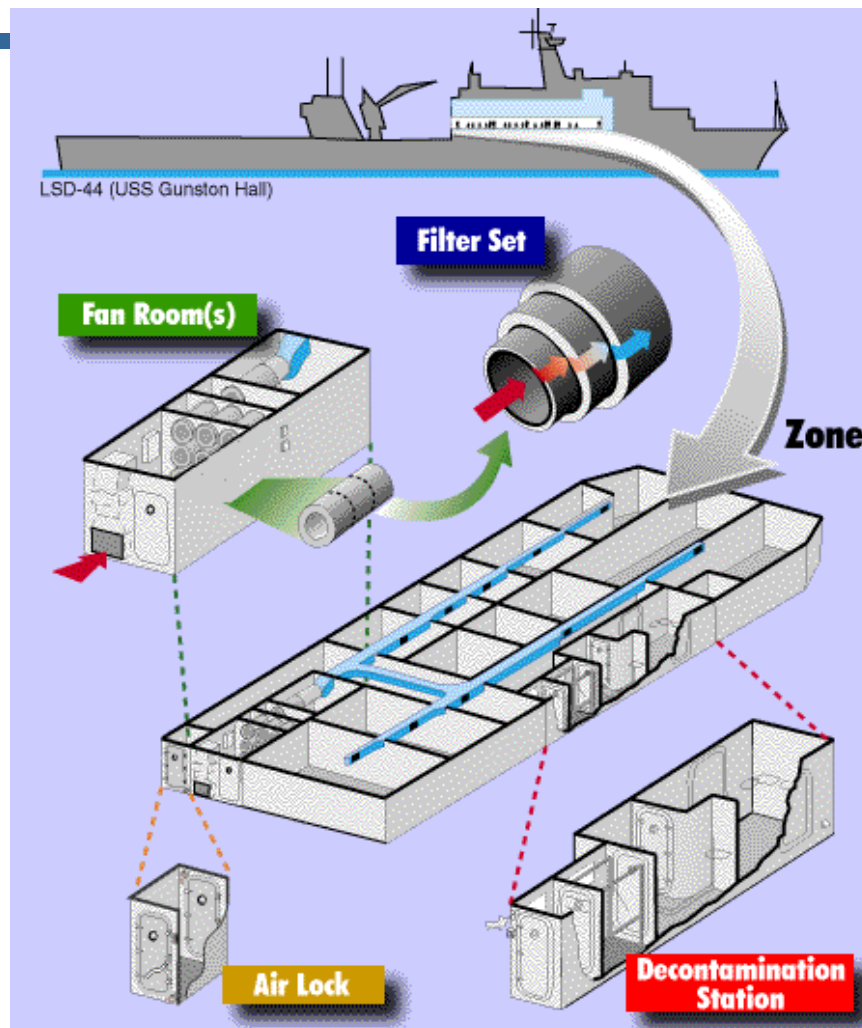


CPS Backfit



Shipboard Collective Protection System

- Provides large, high value ships with colpro in critical shipboard spaces.
- Allows mission-critical operations in an NBC environment.
- Covers 15 Amphibious Class Ships:
 - Hospital areas (includes Casualty Decon Station)
 - Command/Control areas
 - Rest/relief areas
- CPS for new construction ships is covered by Navy shipbuilding funds.



Chem Bio Protective Shelter (CBPS)

- Highly mobile, rapidly deployable, self-sustaining 300 sq ft system.
- Currently used by Army medics.
- Setup: 4 people, 20 min.
- Strike: 4 people, 40 min.
- Status: In production.



CP DEPMEDS / CHATH



Collectively Protected Deployable Medical System (CP DEPMEDS)



Chemical Hardened Air Transportable Hospital (CHATH)

- Provide environmentally controlled collective protection kits to fielded Army DEPMEDS hospitals and USAF Air Transportable Hospitals (ATH).
- Perform medical treatment in a CB environment.
- Status: In production / fielded.

Joint Collective Protection Equipment (JCPE) Program

- ❑ Provide needed improvements to currently fielded collective protection systems
 - ❑ Based on requirements of existing systems
 - ❑ Insert new technologies to reduce cost and logistics
- ❑ Provide cost saving standardization of equipment across Service lines



Joint Collective Protection Equipment (JCPE)

Shelter Backfit Kits

Provide collective protection kits using the latest technology and equipment to backfit these five tent systems, with availability starting in FY04:



Tent, Extended, Modular,
Personnel (TEMPER)



Modular General Purpose
Tent System (MGPTS)



USAF Medium Shelter
System (MSS)



USAF Small Shelter
System (SSS)



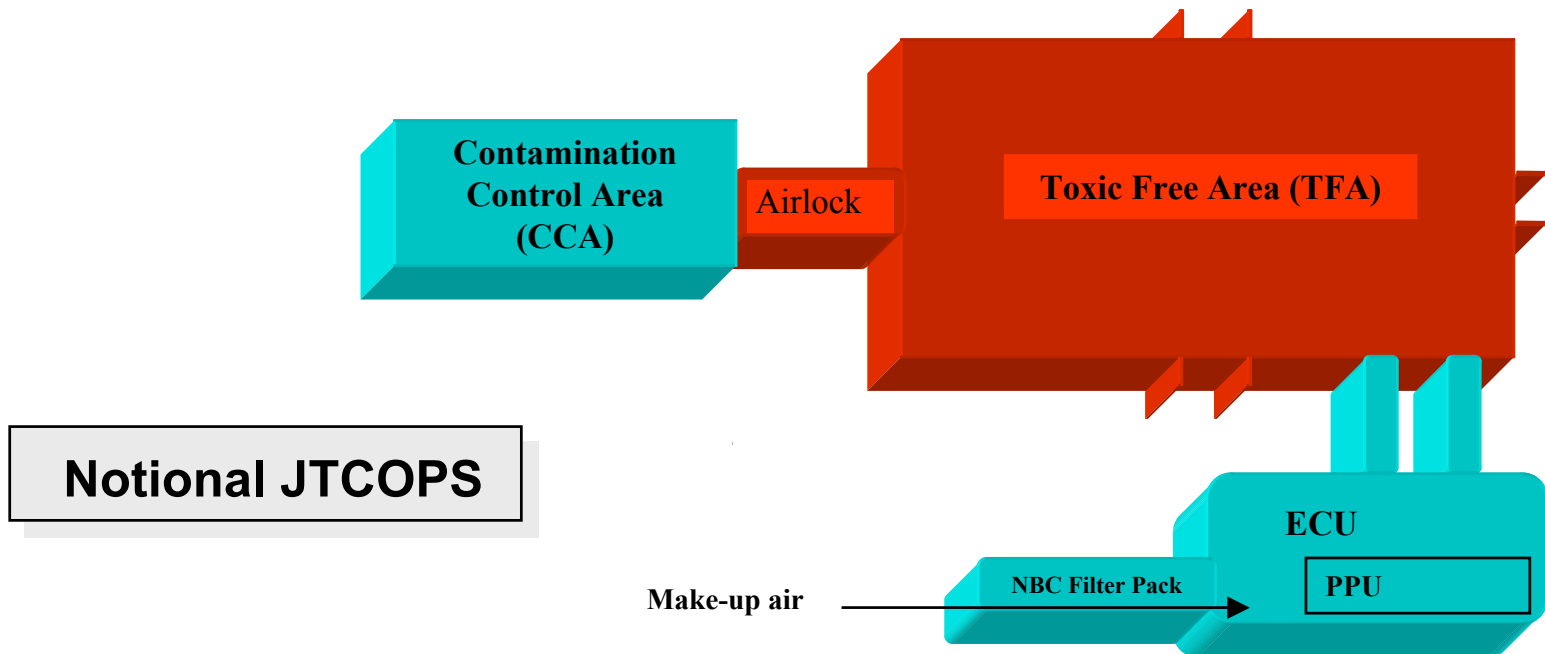
Modular Command Post
System (MCPS)

JCPE Shelter Backfit Kits (cont.)

- Improved liner seams, liner durability, and connections.
- NBC hardening kits for Environmental Control Units (ECUs).
- Correction of motor blower reliability, noise, heat load problems.
- Improved airlocks with greatly reduced purge times.
- Improved filtration performance, filter life, and filter maintenance.
- Improved latrine capability.
- System life cycle engineering of all components.
- Basic kits available in 2004.

Joint Transportable Collective Protection System (JTCOPS)

- Provide a collective protection capability that is totally integrated with standard military tents and transparent to the user.
- RDT&E start scheduled for 2004. Initial production scheduled for 2008.



Building Collective Protection

- Proven systems available now for new construction and/or backfit of buildings and/or selected areas of buildings.

6000 cfm modular system



200 cfm filter

600 cfm filter housing



Colpro Technology Base

Focusing on two major areas:

- New NBC Filtration Technology
 - Increased filter capacity and performance
 - Reduced logistics burden, reduced cost, weight, and power
 - Expanded protection capability (TICs, TIMs, new agents)
- Advanced NBC Tentage
 - Improved weight, volume, transportability (rapid deployability)
 - Reduced cost
 - Improved durability
 - Integration as standard tentage material

Industry Opportunities

- Commerce Business Daily (CBD) announcements
- Technology Base: Partner with a DoD lab (SBCCOM Edgewood or Natick, NSWC Dahlgren, AFRL Tyndall, HSC Brooks, USMC Quantico, etc.)
- Joint Collective Protection Equipment (JCPE) program
- Advanced Concept Technology Demonstrations (ACTDs)
- Other government agencies

Summary

- Increased CBR threat has heightened the need and importance of collective protection.
- Colpro must compete with other critical chem-bio programs for resources.
- DoD focus on future colpro equipment:
 - Rapid deployability
 - Cheaper
 - Easier to use
 - Reduced logistics burden
- Industry products and innovation are needed for future colpro equipment.